

RESOURCE PACKET

Assessment of Speech: Fluency



FLUENCY SEVERITY RATING SCALE
Determination of Speech Impairment: Fluency

Student _____ School _____ Grade _____ Date of Rating _____ DOB _____ Age _____ SLT _____

Formal/Informal Assessment	0	1	2	3
Frequency	<input type="checkbox"/> Frequency of dysfluency is within normal limits for age, sex and speaking situation and/or <input type="checkbox"/> ≤ 2 stuttered words per minute and/or <input type="checkbox"/> ≤ 4 % stuttered words	<input type="checkbox"/> Transitory dysfluencies are observed in speaking situations and/or <input type="checkbox"/> 3-4 stuttered words per minute and/or <input type="checkbox"/> 5% to 11% stuttered words	<input type="checkbox"/> Frequent dysfluent behaviors are observed in many speaking situations and/or <input type="checkbox"/> 5-9 stuttered words per minute and/or <input type="checkbox"/> 12% to 22% stuttered words	<input type="checkbox"/> Habitual dysfluent behaviors are observed in majority of speaking situations and/or <input type="checkbox"/> More than 9 stuttered words per minute and/or <input type="checkbox"/> ≥23% stuttered words
Descriptive Assessment	<input type="checkbox"/> Speech flow and time patterning are within normal limits. Developmental dysfluencies may be present	<input type="checkbox"/> Whole-word repetitions <input type="checkbox"/> Part-word repetitions and/or <input type="checkbox"/> Prolongations are present with no secondary characteristics. Fluent speech periods predominate	<input type="checkbox"/> Whole-word repetitions <input type="checkbox"/> Part-word repetitions and/or <input type="checkbox"/> Prolongations are present. Secondary symptoms, including blocking avoidance and physical concomitants may be observed.	<input type="checkbox"/> Whole-word repetitions <input type="checkbox"/> Part-word repetitions and/or <input type="checkbox"/> Prolongations are present. Secondary symptoms predominant. Avoidance and frustration behaviors are observed.
Speaking Rate	<input type="checkbox"/> Speaking rate not affected	<input type="checkbox"/> Speaking rate affected to mild degree. Rate difference rarely notable to observer, listener and/or <input type="checkbox"/> 82-99 WSM 125-150 WSM	<input type="checkbox"/> Speaking rate affected to moderate degree. Rate difference distracting to observer, listener and/or <input type="checkbox"/> 60-81 WSM 150-175 WSM	<input type="checkbox"/> Speaking rate affected to severe degree and distracting to listener/observer and/or <input type="checkbox"/> <59 WSM > 175 WSM

- Instructions:
1. Circle the score for the most appropriate description for each of these categories: *Frequency*, *Descriptive Assessment*, *Speaking Rate*.
 2. Compute the total score and record below.
 3. Circle the total score on the rating bar/scale below.

2	3	4	5	6	7	8	9
WNL		Mild	Moderate	Severe			

TOTAL SCORE _____

Based on compilation of the assessment data, this student scores in the *Mild*, *Moderate* or *Severe* range for Fluency disorder. ☐ Yes ☐ No

*This assessment provides documentation/supporting evidence of adverse effects of the Fluency Disability on educational performance. ☐ Yes ☐ No

Determination of eligibility as a student with a Speech and/or Language Impairment is made by the IEP Team.

ASSESSMENT GUIDELINES FOR SPEECH-FLUENCY

FLUENCY ASSESSMENT CONSIDERATIONS

Fluency is a speech pattern, which flows in a rhythmic, smooth manner. Dysfluencies are disruptions or breaks in the smooth flow of speech. Even speakers who are normally fluent experience dysfluencies. A speaker is dysfluent when unintentionally repeating a word or phrase, forgetting a word mid-utterance or interjecting too many “uhs” or “OKs” during speech. It is the SLT’s responsibility to differentiate between normal dysfluencies and a fluency disorder (Shipley & McAfee, 1998).

CONDUCTING A SPEECH EVALUATION FOR FLUENCY

- Conduct hearing and vision screenings.
- Obtain relevant information from the parents: concerns about communication skills, developmental history, etc.
- Information must be gathered from two educators: the student’s classroom teacher as well as another professional. For preschoolers, obtain this information from child care providers or other adults who see the child outside of the family structure.
- Obtain from teachers information related to progress in the general curriculum, communication skills, behavior, and social interactions. General curriculum for preschoolers is developmentally appropriate activities.
- Review school records, e.g. grades, test scores, special education files, documentation of prereferral strategies/interventions, and discipline and attendance records.
- Complete an oral-peripheral examination.
- Measure fluency using formal/informal assessments for frequency, descriptive assessment, and speaking rate.
- Complete a naturalness rating scale.
- Complete the *Fluency Severity Rating Scale* using the data from the fluency assessment.
- Finalize and submit to the IEP team a *Speech and Language Evaluation Report*.

FLUENCY MEASUREMENT CONSIDERATIONS

The following describes procedures that may be used to analyze:

- frequency of stuttering,
- duration of stuttering,
- rate of speech,
- speech naturalness,
- coping mechanisms, and
- covert stuttering behaviors.

To analyze *frequency of stuttering*, use the following procedures to measure the types of dysfluencies.

Collect and transcribe a 200-syllable spontaneous communication sample in each of a variety of settings, using audio or videotape. Videotape is preferable for analyzing secondary characteristics and struggle behaviors. The 200 syllables should only represent the intended message. Do not count repetitions as syllables. Revisions are counted as part of the 200 syllable sample. The transcription should also include the instances of stuttering.

Count the number of occurrences of dysfluencies such as hesitations, interjections, revisions, prolongations, visible/audible tensions, etc. Count the number of instances of each type of stuttering and struggle behavior (audible/visible tension). Divide this number by the total number of syllables (200), and multiply by 100 to obtain the percentage of types of dysfluencies (Campbell and Hill, 1992). Subtract this number from 100 to obtain the percentage of fluent speech. A frequency analysis may also be accomplished by collecting and analyzing the number of stuttered words in a speech sample of 150 words (Riley, 1980). However, this method may penalize a speaker who uses multisyllabic words (Peters and Guitar, 1991).

To analyze *duration of stuttering*, use the following durational measurements.

Collect a 10- to 15-minute speech sample of the student's conversational speech using video or audiotape. Videotape is preferable for analyzing secondary characteristics and struggle behaviors. Use a stopwatch to time 5 minutes (300 seconds) of the *student's* talking time.

Review the sample and use a stopwatch to obtain the total number of seconds of dysfluencies. Divide the total number of seconds of dysfluencies by the total number of seconds in the speech sample and multiply by 100 to obtain the percentage of duration of dysfluent speech (Bacolini, P., Shames, G., and Powell, L. 1993). If using a video sample, watch the video once again, noting the types of dysfluencies and secondary characteristics.

Curlee and Perkins (1984) suggest the following other methods of analyzing duration within a speech sample:

1. Use a stopwatch to time the length of 10 different stuttering moments at random within the sample. These moments of stuttering should be representative of the sample. To obtain the average duration of stuttering, divide the sum of the 10 stuttering moments by 10.
2. Choose the three longest stuttering occurrences and time each with a stopwatch. Record the results.

Peters and Guitar (1991) prefer a 5-minute sample, rather than a 150-word sample suggested by Riley, to ensure a more complete sample for durational measures.

To analyze *rate of speech*, Curlee and Perkins (1994) use the following procedure.

Collect a 5-minute speech sample using speaking or oral reading. The examiner will need 10 minutes of taping to get the 5 minutes of the student's talking/oral reading time. Count the number of syllables or words in the intended message. Then, divide the number of syllables or words by the total number of minutes of the student's speaking/oral reading time in the sample to obtain a syllable per minute rating (SPM) or a word per minute rating (WPM).

To analyze *speech naturalness*, use the following procedure.

Collect a 5-minute speech sample. Use a 9-point naturalness scale to determine whether speech has a natural sounding quality. To analyze speech quality, judgments of naturalness may be made by SLTs or naive listeners (lay persons, graduate students). Review the sample (watch/listen), and at 15-second intervals make subjective judgments about the speech to determine whether it sounds highly natural or highly unnatural, despite the percentage of fluency. A total of at least 10 such judgments should be made. To calculate naturalness, add the number assigned at each rating and then divide that number by 10. The Mean naturalness rating for adolescents/adults is 2.12 to 2.39 on the 9-point naturalness scale (Martin et al., 1984; Ingham et al., 1985). The Mean naturalness rating for children is 3.0 (J. Ingham, 1998). For children, choose one of the following procedures, if appropriate. For adolescents, you must choose one.

To assess *coping mechanisms*, Culatta and Goldberg (1995) recommend using the following methods.

- observations, checklists, rating scales and self-rating protocols
- reports by the student of how s/he manipulates speech in order to cope with stuttering
- reports by the student of experiences of tension
- reports by the student of vigilance necessary to achieve and maintain fluent speech

To assess *covert stuttering behaviors*, Culatta and Goldberg (1995) recommend using a variety of interview and questionnaire protocols.

Covert Stuttering Behaviors

There are six major measurable types of covert stuttering behaviors:

(1) emotional reactions, (2) avoidance, (3) expectation of stuttering, (4) expectation of fluency, (5) motivation, and (6) self-perception. All types are related to the stutterer's belief system and none are observable. To quantify them, diagnosticians must rely on the stutterer's self-assessment. This lack of verifiable data is viewed by some as introducing an unnecessary amount of subjectivity into the study of stuttering (Ingham, 1990). Others believe that even though measuring covert behaviors is not as easily accomplished or objective as overt behaviors, understanding the stutterer's belief system is essential for understanding how to proceed in therapy (Perkins. I., 1990 & Cooper & Cooper, 1985).

Emotional Reaction - Each stutterer's reaction to both fluent and dysfluent speech is unpredictable. The fear of fluency may be as great as the fear of stuttering. Students may become withdrawn, aggressive, passive, hostile or depressed by their manner of speech. SLTs need a window into these feelings to help construct an effective therapy plan.

Avoidance - Stutterers may not only tend to avoid production of feared sounds or words, but also situations and encounters with specific people. Regardless of the type of therapy in which the stutterer is involved, clinicians will almost always ask the stutterer to engage in feared situations. By having an understanding of what is currently being avoided, Speech-Language Therapists (SLTs) can design a program that can eventually confront these avoidances.

Expectation of Stuttering - To a large extent, we are a product of our past experiences. Stutterers who expect to stutter may be engaging in a self-defeating exercise regardless of the therapeutic techniques taught to them by their SLT. By understanding the extent to which a stutterer believes that control and normal communication are impossible, SLTs can begin addressing the problem.

Expectation of Fluency - It is important to determine if the stutterer believes that some form of control over speech is possible. The expectation that one can be fluent is an indication that the use of fluent speech is a possibility for that person.

Motivation - Changes in long-term behaviors can be difficult to accomplish, whether they involve behaviors such as smoking, procrastination or stuttering. Assessments of motivation are less likely to involve general questions of whether the individual would like to develop fluency and more likely to examine the extent of commitment and effort an individual is willing to make to affect behavioral change.

Self-Perception - How an individual sees himself/herself is important in the structuring of intervention goals and objectives. Consequently, different instructional protocols may be developed for two individuals who have similar covert behaviors but who differ dramatically on the degree of severity each perceives.

Measurement Procedures

The two most common ways to obtain information about how a stutterer's beliefs can affect speech are the interview and use of the questionnaires. Questionnaires may require either forced-choice answers or rating scale evaluations. Examples of forced-choice questions are ones that can be answered with "yes" or "no", or those that require the stutterer to choose between self-descriptive statements, such as "a mild stutterer" or "a severe stutterer". A rating question asks the stutterer to describe his or her perceptions through the use of a scale with end points such as "calm" and "anxious", "mild" and "severe", or "strongly agree" and "strongly disagree". It is important to realize that the answers derived from these test instruments do not necessarily provide a picture of reality, but rather describe how stutterers view themselves within their world.

Assessment Guidelines for Speech-Fluency

Covert Assessment Protocols

Stutterer's Self-Ratings of Reactions to Speech Situations - This instrument has been in use since 1955 and is described in detail by Williams (1978). The stutterer is asked to list his/her reactions to 40 common speaking situations on four parameters: avoidance, reaction, stuttering, and frequency. Each reaction is scaled on a 1 to 5 continuum. Shumak (1955) found that these self-ratings and categories tended to interact in terms of the severity of the stuttering problem and the student's perceptions of difficulty.

Perceptions of Stuttering Inventory (PSI) – Woolf (1967) devised this 60-item paper and pencil test battery that seeks to measure a student's awareness of struggle, avoidance, and expectancy behaviors that comprise his/her stuttering. As the student checks whether statements are responses "characteristic of me", a pattern will emerge as to how the student perceives his/her stuttering. Questions such as "I avoid talking to people in authority" or "I rearrange what I plan to say to avoid a hard word" reveal avoidance tendencies in daily communication, whereas selection of items such as "I make my voice softer or louder before stuttering" reveals expectancy levels. Selection of responses such as "I make sudden jerky or forceful movements with my head, arms, or body during speech" reveal an awareness or perception of struggling behaviors. These perceptions may exist throughout intervention. A profile will emerge by simply totaling the number of responses to the 20 questions in each area.

Stuttering Problem Profile - Designed by Silverman (1980), the *Stuttering Problem Profile* is designed to help the SLT define intervention goals important to the student. Eighty-six statements are evaluated by the student to help determine in which areas the stutterer is most motivated to improve. The author suggests that the value of this instrument is in designing intervention programs.¹

INTERPRETING AND REPORTING EVALUATION RESULTS

The child exhibits dysfluencies during connected speech in at least one of the following areas, with accompanying adverse effect on educational performance:

1. Frequency and/or Durational Measurements of Dysfluencies (based on a speech sample of 200 syllables, 200 words or 10 minutes) in 1 or more settings:
 - a) more than 2% atypical dysfluencies, with or without the presence of struggle behaviors; or
 - b) more than 5% atypical dysfluencies, with or without the presence of struggle behaviors, covert stuttering behaviors or coping mechanisms, or with the presence of one or more risk factors.
2. Rate of speech at least ± 1.5 standard deviations from the mean.
3. Speech naturalness outside the normal range of 3.0 for children and 2.12-2.39 for adolescents/adults on a 9-point naturalness rating scale.

¹ Source: Culatta, R. and Goldberg, S., *Stuttering Therapy: An Integrated Approach to Theory and Practice*. Needham Heights, MA. Allyn and Bacon. 1995, 84-88

USING THE FLUENCY SEVERITY RATING SCALE

The *Fluency Severity Rating Scale* is to be used as a tool after a complete assessment of the student's fluency performance. The scale is designed to assist the examiner with interpretation and documentation of the results of assessment findings in terms of severity or intensity. This scale is not a diagnostic instrument and should not be used in the absence of assessment data.

In order to be identified as a student with a speech impairment with fluency difficulties, dysfluencies must be determined to have an "adverse effect on educational performance". The rating scale serves three purposes:

1. to document the presence of dysfluent behaviors and their degree (Mild, Moderate, Severe),
2. to indicate the absence or presence of adverse effects on educational performance, and
3. to determine whether or not the student meets eligibility standards for a speech impairment in fluency.

"Educational performance" refers to the student's ability to participate in the educational process and must include consideration of the student's social, emotional, academic, and vocational performance. The presence of speech dysfluencies does not automatically indicate an adverse affect on the student's ability to function within the educational setting. The dysfluencies must be shown to interfere with the student's ability to perform in the educational setting before a disability is determined. The effect on educational performance is, therefore, best determined through classroom observation, consultation with classroom and special education teachers, and interviews with parents and the student. Teacher checklists are useful for determining specifically how the dysfluencies affect educational performance.

PARENT INPUT – FLUENCY

Student's Name _____ Date of Birth _____
Form Completed By _____ Relationship to Student _____
Address _____ Phone _____

1. Give approximate or exact date when stuttering was first noticed. _____

2. Who noticed the stuttering first? _____
3. In what situation was it first noticed or commented upon? Under what circumstances did it occur? _____

4. At the time when stuttering was first noticed, did the student seem to be aware of the fact that s/he was speaking in a different manner? _____

5. Did s/he ever show surprise or bewilderment after s/he had trouble on a word? If so, how did s/he show such reactions? _____

6. Was there an awareness of stuttering, by the student in any way at first? If so, amplify your answer. After having a lot of trouble on a word, were *any* of the following behaviors observed?

Circle or Check those that apply. Provide additional explanation in spaces provided.

- a. Suddenly stopped trying: _____
- b. Suddenly left the speaking situation: _____
- c. Shouted the word/ Cried/ Hit someone/ Smashed something/ Spit upon somebody/ Hid his/her face/ Laughed/ Did something else: _____
- d. Seemed to be a little more careful with his/her speech in attempting words on which s/he had difficulty: ☐ YES ☐ NO
How? By lowering voice/ By slowing down/ By ceasing other bodily activity for the moment/ By looking straight ahead of him/her for the moment/ By shifting his/her gaze away from the listener/ In any other way? _____

Parent Input – Fluency

7. What attempts have been made to correct the stuttering? _____

8. At the time when stuttering was first noticed, was there more trouble exhibited in some situations than in others? If so, what were they? _____

9. Did stuttering occur more often when speaking with certain people? Who? _____

10. Were there any topics of conversation with which s/he had more trouble? _____

11. Did excitement seem to cause more stuttering? _____

12. Did s/he talk to strangers with less trouble than to people s/he knew well? _____

13. At the time when stuttering began, did fatigue, fear, illness, or pressing need for communication seem to cause more trouble? _____

14. Since the stuttering first began, has there been any change in the stuttering symptoms? _____

15. Did you notice a gradual increase in stuttering? _____

16. Were there any instances in which the number of troublesome words and number of repetitions suddenly increased? _____

TEACHER INPUT—FLUENCY

Student: _____ Birthdate _____ Age: _____
Teacher: _____ School: _____ Grade _____

Your observations of the above student's speech fluency will help determine if the problem adversely affects educational performance. Check all items that have been observed. Please return the completed form to the Speech-Language Therapist.

- | | Yes | No |
|---|-------|-------|
| 1. Does the student have characteristics associated with stuttering (e.g., part or whole word repetitions, silent blocks, sound or word prolongations)? | _____ | _____ |
| 2. Are the stuttering characteristics accompanied by other behaviors (e.g., tension in the upper trunk, head and neck, facial tics, body movements)? | _____ | _____ |
| 3. Does stuttering make it difficult to understand the content of his/her speech? | _____ | _____ |
| 4. Does the student appear to talk less in the classroom because of stuttering? | _____ | _____ |
| 5. Does the student avoid verbal participation during classroom activities? | _____ | _____ |
| 6. Does the student avoid verbal participation in social situations? | _____ | _____ |
| 7. Do you think the student is aware of his/her communication problems? | _____ | _____ |
| 8. Have the student's parents talked to you about his/her fluency disorder? | _____ | _____ |

☐ In my opinion these behaviors do not adversely affect educational performance.

☐ In my opinion these behaviors do adversely affect educational performance.

Do you have other observations relating to this student's communication skills?

☐ YES ☐ NO *It is my opinion that these behaviors adversely affect the student's educational performance.*

If yes, provide explanation: _____

Teacher's Signature: _____ Date: _____

Adapted from Standards for the delivery of speech-language services in Michigan public schools, Michigan Speech-Language Hearing Association (1985)

TEACHER INPUT – FLUENCY CHECKLIST FOR PRESCHOOLERS

Student _____ Birthdate _____ Age: _____
Teacher _____ School _____ Grade _____

- | | Yes | No |
|---|----------------|----------------|
| 1. Does the student stutter more in certain situations?
Describe _____
_____ | _____ | _____ |
| 2. Does the student repeat whole words?
Does the student repeat beginning sounds? | _____
_____ | _____
_____ |
| 3. Does the student's speech contain filler speech such as "um", "oh", etc.? | _____ | _____ |
| 4. Does the student appear frustrated when s/he communicates? | _____ | _____ |
| 5. Does the student exhibit excessive behaviors such as eye blinking,
noticeable facial tension, or extraneous body movements? | _____ | _____ |
| 6. Does the student have noticeable pitch variations? | _____ | _____ |

☐ YES ☐ NO *It is my opinion that these behaviors adversely affect the student's educational performance.*

If yes, provide explanation: _____

Teacher's Signature _____ Date _____

Source: Michigan Department of Education

Teacher Input – Fluency Checklist for Preschoolers

CONTINUUM OF DYSFLUENT SPEECH BEHAVIOR

More Usual

1) *Typical Dysfluencies*

Hesitations (silent pauses)



Interjection of sounds, syllables or words



Revisions of phrases or sentences



Phrase repetitions



One syllable word repetitions
Two or less repetitions per instance
Even stress, no tension

C
R
O
S
S
O
V
E
R

B
E
H
A
V
I
O
R

Stuttering

2) *Atypical Dysfluencies*

One syllable word repetition
Three or more repetitions per instance
or uneven stress



Part-word syllable repetitions
Three or more repetitions per instance
or uneven stress

— — — — —



Sound repetitions



Prolongations



Blocks



Increased tension noted;
e.g., tremor of lips or jaw or vocal tension

More Unusual

Source: Hugo Gregory, Ph.D., Professor Emeritus, and Diane Hill, M.A., Clinical Instructor, Northwestern University. From handbook for program, Stuttering Therapy Workshop for Specialists. July 6-17, 1992.

TYPES OF DYSFLUENCIES

OBSERVABLE CHARACTERISTICS OF STUTTERING

Behavior	Definition	Example
Hesitation	Any nontense break in the forward flow of speech	I ___ am going home.
Broken words	With unacceptable within-word hesitations	Partially uttered words: I am g__oing home.
Repetition	Repeated utterances of parts of words (PWR), words (WR), and phrases (PR)	I am <u>g</u> going.(PWR) I <u>am</u> <u>am</u> going.(WR) <u>lam</u> <u>lam</u> going (PR)
Interjections	Use of sounds, syllables, and words that are independent of context of utterance	I <u>er</u> <u>er</u> am <u>uh</u> going.
Prolonged sounds	Unacceptably prolonged sounds, usually at the start of a word	I am <u>s-s-s-so</u> late
Dysrhythmic phonation	Distortion of the prosodic elements <u>within</u> a word, with improper stress, timing, or accenting	I am <u>going</u> (rising inflection) home.
Tension	Audible manifestation of abnormal breathing or muscular tightening <u>between</u> words, parts of words, or interjections	I <u>am</u> (forced breathing) going home.
Revisions, modifications	Grammatical or content	<u>I am</u> , I was going.
Incomplete phrases	Failure to complete an initiated unit of speech	<u>I am---</u> but not today.

Adapted from Williams, D.E., Dailey, F. L. & Spriesterbach, D.D. (1978), Diagnostic Methods in Speech Pathology New York: Harper & Row.

From Culatta, R, and Goldberg, S., Stuttering Therapy: An Integrated Approach to Theory and Practice. Needham Heights, MA : Allyn and Bacon, 1995.

STUTTERER'S SELF-RATINGS OF REACTIONS TO SPEECH SITUATIONS¹

Page 1 of 3

Name _____ Age _____ Sex _____
Examiner _____ Date _____

After each item put a number from 1 to 5 in each of the four columns.

Start with right-hand column headed *Frequency*. Study the five possible answers to be made in responding to each item and write the number of the answer that best fits the situation for you in each case. Thus, if you habitually take your meals at home and seldom eat in a restaurant, certainly not as often as once a week; write the number 5 in the *Frequency* column opposite item No.1, "Ordering in a restaurant." In like manner respond to each of the other 39 items by writing the most appropriate number in the *Frequency* column. When you have finished with this column fold it under so you cannot see the numbers you have written. This is done to keep you from being influenced unduly by the numbers you have written in the *Frequency* column when you write your responses to the 40 situations in the Stuttering column.

Now, write the number of the response that best indicates how much you stutter in each situation. For example, if in ordering meals in a restaurant you stutter mildly (for you), write the number 2 in the *Stuttering* column after item No. 1. In like manner respond to the other 39 items. Then fold under the *Stuttering* column so you will not be able to see the numbers you have written in it when you make your responses in the *Reaction* column.

Following the same procedure, write your responses in the *Reaction* column, fold it under. And, finally, write your responses in the *Avoidance* column.

Stuttering – Self-Profiles

¹ Adapted from Johnson, W., Darley, F.I., & Spriestersbach. *Diagnostic Methods in Speech Pathology*. New York: Harner & Row, 1978, pp. 288-290, as adapted from: Culatta, R. and Goldberg, S.: *Stuttering Therapy: An Integrated Approach to Education and Practice*. Needham Heights, MA. Allyn and Bacon. 1984, 87-89.

Numbers for each of the columns are to be interpreted as follows:

A. Avoidance

1. I never try to avoid this situation and have no desire to avoid it.
2. I don't try to avoid this situation, but sometimes I would like to.
3. More often than not I do not try to avoid this situation, but sometimes I do try to avoid it.
4. More often than not I do try to avoid this situation.
5. I avoid this situation every time I possibly can.

B. Reaction

1. I definitely enjoy speaking in this situation.
2. I would rather speak in this situation than not.
3. It's hard to say whether I'd rather speak in this situation or not.
4. I would rather not speak in this situation.
5. I very much dislike speaking in this situation.

C. Stuttering

1. I don't stutter at all (or only very rarely) in this situation.
2. I stutter mildly (for me) in this situation.
3. I stutter with average severity (for me) in this situation.
4. I stutter more than average (for me) in this situation.
5. I stutter severely (for me) in this situation.

D. Frequency

1. This is a situation I meet very often, two or three times a day, or even more, on the average.
2. I meet this situation at least once a day with rare exceptions (except Sunday, perhaps).
3. I meet this situation from three to five times a week on the average.
4. I meet this situation once a week, with few exceptions, and occasionally I meet it twice a week.
5. I rarely meet this situation—certainly not as often as once a week.

	Avoidance	Reaction	Stuttering	Frequency
1. Ordering in a restaurant				
2. Introducing myself (face to face)				
3. Telephoning to ask price, train fare, etc.				
4. Buying plane, train or bus ticket				
5. Short class recitation (ten words or less)				
6. Telephoning for taxi				
7. Introducing one person to another				
8. Buying something from store clerk				
9. Conversation with good friend				
10. Talking with an instructor after class or in his office				
11. Long distance telephone call to someone I know				
12. Conversation with my father				
13. Asking girl for date (or talking to man who asks me for a date)				
14. Making short speech (one or two minutes) in familiar class				
15. Giving my name over the telephone				
16. Conversation with my mother				
17. Asking a secretary if I can see her employer				
18. Going to house and asking for someone				
19. Making a speech to unfamiliar audience				
20. Participating in committee meeting				
21. Asking instructor question in class				
22. Saying hello to a friend going by				
23. Asking for a job				
24. Telling a person a message from someone else				
25. Telling a funny story with one stranger in a crowd				
26. Parlor games requiring speech				
27. Reading aloud to friends				
28. Participating in a bull session				
29. Dinner conversation with strangers				
30. Talking with my barber (or beauty operator)				
31. Telephoning to make appointment or arrange meeting place with someone				
32. Answering roll call in class				
33. Asking at a desk for a book or card to be filled out				
34. Talking with someone I don't know well while waiting for bus or class, etc.				
35. Talking with other players during a game				
36. Taking leave of a hostess				
37. Conversation with a friend walking along the street				
38. Buying stamps at post office				
39. Giving directions or information to strangers				
40. Taking leave of a girl (boy) after a date				
TOTAL				
Average				
Number of 1's				
Number of 2's				
Number of 3's				
Number of 4's				
Number of 5's				

PERCEPTIONS OF STUTTERING INVENTORY (PSI)¹

Name _____ Age _____ S _____ A _____ E _____
 Examiner _____ Date _____

Directions

Here are sixty statements about stuttering. Some of these may be characteristic of your stuttering. Read each item carefully and respond as in the example below.

Characteristic of me

_____ Repeating sounds.

Put a check mark (✓) under characteristic of me if “repeated sounds” is part of your stuttering; if it is not characteristic, leave the space blank.

Characteristic of me refers only to what you do now, not to what was true of your stuttering in the past and which you no longer do, and not what you think you should or should not be doing. Even if the behavior described occurs only occasionally or only in some speaking situations, if you regard it as characteristic of your stuttering, check the space under characteristic of me.

Characteristic of me

1. _____ Avoiding talking to people in authority (e.g., teacher, employer, or clergyman) (A)
2. _____ Feeling that interruptions in your speech (e.g., pauses, hesitations, or repetitions) will lead to stuttering. (E)
3. _____ Making the pitch of your voice higher or lower when you expect to get “stuck” on words. (E)
4. _____ Having extra and unnecessary facial movements (e.g. flaring your nostrils during speech attempts). (S)
5. _____ Using gestures as a substitute for speaking (e.g., nodding your head instead of saying “yes” or smiling to acknowledge a greeting). (A)
6. _____ Avoiding asking for information (e.g., asking for directions or inquiring about a train schedule). (A)
7. _____ Whispering words to yourself before saying them or practicing what you are planning to say long before you speak. (E)
8. _____ Choosing a job or a hobby because little speaking would be required. (A)
9. _____ Adding an extra and unnecessary sound, word or phrase to your speech (e.g., “uh,” “well”, or “let me see”) to help yourself get started (F)
10. _____ Replying briefly using the fewest words possible. (A)
11. _____ Making sudden jerky or forceful movements with your head, arms or body during speech attempts (e.g., clenching your fist or jerking your head to one side) (S)

Stuttering – Self-Profiles

¹ From Wolf, G. (1967). ‘Perceptions of Stuttering~ Inventory’. Br J Disorders Common. 2. 158-177. Culatta, R. and Goldberg, S. Stuttering Therapy: An Integrated Approach to Theory and Practice. Needham Heights, MA. Allyn and Bacon, 1984. pp.90-92

12. _____ Repeating a sound or word with effort (S)
13. _____ Acting in a manner intended to keep you out of a conversation or discussion (e.g., being a good listener, pretending not to hear what was said, acting bored or pretending to be in deep thought) (A)
14. _____ Avoiding making a purchase (e.g., going into a store or buying stamps in the post office) (A)
15. _____ Breathing noisily or with great effort while trying to speak (S)
16. _____ Making your voice louder or softer when stuttering is expected (E)
17. _____ Prolonging a sound or word (e.g. rn-rn-rn-rn—my) while trying to push it out (S)
18. _____ Helping yourself to get started talking by laughing, coughing, clearing your throat, gesturing or some other body activity or movement (E)
19. _____ Having general body tension during speech attempts (e.g., shaking, trembling or feeling knotted up inside) (S)
20. _____ Paying particular attention to what you are going to say (e.g., the length of a word or the position of a word in a sentence) (E)
21. _____ Feeling your face getting warm and red (as if you are blushing) as you are struggling to speak (S)
22. _____ Saying words or phrases with force or effort (S)
23. _____ Repeating a word or phrase preceding the word on which stuttering is expected (E)
24. _____ Speaking so that no word or sound stands out (e.g., speaking in a singsong voice or in a monotone) (E)
25. _____ Avoiding making new acquaintances (e.g., not visiting with friends, not dating, or not joining social, civic, or church groups) (A)
26. _____ Making unusual noises with your teeth during speech attempts (e.g., grinding or clicking your teeth) (S)
27. _____ Avoiding introducing yourself, giving your name, or making introductions (A)
28. _____ Expecting that certain sounds, letters or words are going to be particularly “hard” to say (e.g., words beginning with the letter “p”) (E)
29. _____ Giving excuses to avoid talking (e.g., pretending to be tired or pretending lack of interest in a topic) (A)
30. _____ Running out of breath” while speaking (S)
31. _____ Forcing out sounds (S)
32. _____ Feeling that your fluent periods are unusual, that they cannot last, and that sooner or later you will stutter (E)
33. _____ Concentrating on relaxing or not being tense before speaking (E)
34. _____ Substituting a different word or phrase for the one you had intended to say (A)

- 35. _____ Prolonging or emphasizing the sound preceding the one on which stuttering is expected (E)
- 36. _____ Avoiding speaking before an audience (A)
- 37. _____ Straining to talk without being able to make a sound (S)
- 38. _____ Coordinating or timing your speech with a rhythmic movement (e.g., lapping your feet or swinging your arm)
- 39. _____ Rearranging what you had planned to say to avoid a “hard” sound or word (A)
- 40. _____ “Putting on an act” when speaking (e.g., adopting an attitude of confidence or pretending to be angry) (E)
- 41. _____ Avoiding the use of the telephone (A)
- 42. _____ Making forceful and strained movements with your lips, tongue, jaw or throat (e.g., moving your jaw in an uncoordinated manner) (S)
- 43. _____ Omitting a word, part of a word or a phrase which you had planned to say (e.g., words with certain sounds or letters) (A)
- 44. _____ Making “uncontrollable” sounds while struggling to say a word (S)
- 45. _____ Adopting a foreign accent, assuming a regional dialect, or imitating another person’s speech (E)
- 46. _____ Perspiring much more than usual while speaking (e.g., feeling the palms of your hands getting clammy) (S)
- 47. _____ Postponing speaking for a short time until certain you can be fluent (e.g., pausing before “hard” words) (E)
- 48. _____ Having extra and unnecessary eye movements while speaking (e.g., blinking your eyes or shutting your eyes tightly) (S)
- 49. _____ Breathing forcefully while struggling to speak (S)
- 50. _____ Avoiding talking to others of your own age group (your own or the opposite sex) (A)
- 51. _____ Giving up the speech attempt completely after getting “stuck” or if stuttering is anticipated (A)
- 52. _____ Straining the muscles of your chest or abdomen during speech attempts (S)
- 53. _____ Wondering whether you will stutter or how you will speak if you do stutter (E)
- 54. _____ Holding your lips, tongue, or jaw in a rigid position before speaking or when getting “stuck” on a word (S)
- 55. _____ Avoiding talking to one or both of your parents (A)

- 56. _____ Having another person speak for you in a difficult situation (e.g., having someone make a telephone call for you or order for you in a restaurant) (A)
- 57. _____ Holding your breath before speaking (S)
- 58. _____ Saying words slowly or rapidly preceding the word on which stuttering is expected (E)
- 59. _____ Concentrating on how you are going to speak (e.g., thinking about where to put your tongue or how to breathe) (E)
- 60. _____ Using your stuttering as the reason to avoid a speaking activity (A)

From Wolf, G. (1967). 'Perceptions of Stuttering~ Inventory". Br J Disorders Common. 2. 158-177. Culatta, R. and Goldberg, S. Stuttering Therapy: An Integrated Approach to Theory and Practice. Needham Heights, MA. Allyn and Bacon, 1984. pp.90-92

STUTTERING PROBLEM PROFILE (SPP)¹

NAME: _____ AGE: _____ DATE: _____
SCHOOL: _____

Instructions² On the following pages is a list of statements made by stutterers about their stuttering problem following a period of therapy. In order to help you and your Speech/Language Therapist to define goals for intervention, please circle the numbers of those statements that you would like to be able to make at the termination of therapy that you don't feel you can make now. If there are statements you would like to be able to make that aren't included in the list, write them on the last page.

1. I am usually willing to stutter openly.
2. I have learned to speak on exhalation rather than on inhalation.
3. I don't usually have trouble with the first sounds of words.
4. I no longer have a great deal of difficulty speaking in school.
5. I am able to give myself assignments and carry them out to my own satisfaction.
6. I am usually willing to use the telephone.
7. I am as cheerful as most people.
8. I don't usually experience a great amount of tension and feeling of panic before speaking engagements.
9. I repeat sounds, syllables and words infrequently.
10. I have a strong desire to do something about my stuttering problem.
11. I used to be quiet and shy. Now I tend to be outgoing.
12. My attitude toward my stuttering is no longer one of embarrassment.
13. I am not in a rush to respond when talking with people.
14. I don't usually experience emotional depression after stuttering in front of other people.
15. I can usually control the level of tensing when involved in speaking situations.
16. I can read relatively fluently.
17. I have learned to live with my problem.
18. I have learned not to be afraid of people.
19. I no longer have the feeling that stuttering is a miserable abnormality.
20. I am putting more emphasis on communication than on words.
21. I have learned how to stutter in a way that is more acceptable to the listener.
22. I have gained a better overall understanding of the problem.
23. I am confident that if I work at it, I can do something about my stuttering.
24. I understand how fluent speakers react to stutterers and why.
25. I usually don't hold myself back from talking when with a group of people.
26. I am not as ashamed as I used to be because of my stuttering.
27. I usually don't stutter much when giving a formal report to a group of people.
28. I have gained increased courage to participate in conversations, answer phone calls and talk to strangers.
29. I am reasonably tolerant of nonfluency in general.
30. I usually don't avoid feared words and situations.
31. I no longer have a feeling of hopelessness about my stuttering and the fact that I am a stutterer.
32. My mental attitude toward my stuttering has changed.
33. My present attitude is 'true acceptance' of the fact that I am a stutterer.
34. I talk as much as most people.
35. When around other people, I don't usually hold back my feelings because of fear of stuttering.

¹ From Silverman, F. (1980). "The stuttering problem profile: A task that assists both client and clinician in defining therapy goals." *Journal of Speech and Hearing Disorders* 45(1). 119-123. Reprinted with permission of ASHA and the author.

² Source: Culatta, R. and Goldberg, S., *Stuttering Therapy: An Integrated Approach to Theory and Practice*. Needham Heights, MA: Allyn and Bacon, 1984. pp 93-95.

36. I usually am not preoccupied with myself.
37. I am usually willing to discuss my problem with other people.
38. I no longer object to my therapy program.
39. I have expanded my activities, both social and business.
40. I usually don't have strong feelings of shame and embarrassment when I block.
41. I now feel I could change what I do when I stutter if I would wake up and do it.
42. I no longer anticipate stuttering on certain sounds.
43. I am convinced that I can talk without having to struggle.
44. I don't usually become very anxious when I have to initiate a phone call.
45. My breathing while speaking usually isn't irregular.
46. When I stutter, related movements such as hand jerks and eye blinkings rarely occur.
47. I no longer speak at an excessive rate.
48. I usually am not afraid of public reading.
49. I find it relatively easy to ask a clerk for something in a store.
50. I can purposely speak the way I want in the majority of situations.
51. I would be willing to become an officer in a club where I would have to give speeches.
52. I have learned that speaking can be an enjoyable experience.
53. I don't usually worry about entering speaking situations.
54. I don't usually become extremely depressed when in a period of "regression" in my speech.
55. I no longer consider myself an oddity because I stutter.
56. I usually am willing to say what I feel like saying.
57. I usually am not afraid to stutter in front of people.
58. My self-confidence has increased considerably.
59. It doesn't bother me to hear other stutterers speak.
60. I try to avoid changing words I think I will stutter on.
61. Words that I used to use as 'starters' have all but completely disappeared.
62. I am getting involved in many speaking situations.
63. I believe I can overcome my problem to the extent I can live comfortably with it.
64. I look upon my stuttering as something that can be changed or modified.
65. I have as many friends as most people.
66. I have learned to modify some of the overt behavior (e.g., facial grimaces).
67. I am relatively relaxed in speaking situations.
68. I am sure I can completely conquer the problem.
69. I recognize the worth of experimenting and playing around with my stuttering.
70. I don't usually experience feelings of failure when in a period of 'regression' in my speech.
71. I no longer try to avoid looking at the person with whom I am talking while I am stuttering.
72. I now rarely anticipate stuttering.
73. I feel that I have learned to accept the fact I stutter.
74. I have quit being a lone wolf.
75. I do not react violently to my nonfluencies.
76. I feel fairly confident I can do something about my stuttering.
77. I have finally accepted the fact I am a stutterer. Before I never felt like I was one and always tried to "hide" it.
78. I push myself to enter situations in which I know I will stutter instead of avoiding them.
79. I probably talk to as many people as most persons.
80. I am usually willing to modify my stuttering blocks outside the therapy situation in the manner recommended by my therapist.
81. I usually don't worry very much about the reactions of others when I have a speech block.
82. I am paying more attention to my strengths than my weaknesses.
83. I tend to be relatively relaxed when giving a formal report to a group of people.
84. I usually am not afraid to approach people and talk to them.
85. I realize that improving my speech must be a day-to-day affair with specific goals and assignments set up.
86. I have accepted a certain amount of nonfluency as normal speech behavior.
87. I recite in the classroom as much as most students.

Additional Statements (Please Make on Separate Page)

NATURALNESS RATING SCALE – INSTRUCTIONS

School Age Children

Collect two speech samples (speaking and reading). A 5-minute sample is preferred, but a 3-minute sample is acceptable.

Stuttering may interfere with rate of speech during speaking and/or reading. Peters and Guitar (1991) measured the rates of speech in children during their conversations about hobbies, Christmas, school and home activities. They calculated normal pauses in the conversational speech samples, but excluded long pauses for thought that were more than 2 seconds. They provided the following ranges for speech rates:

Age	Range
6 years	140 - 175 syllables per minute
8 years	150 - 180 syllables per minute
10 years	165 - 215 syllables per minute
12 years	165 - 220 syllables per minute

Adolescents and Adults

Peters and Guitar (1991) recommend collecting a 5 minute sample of conversational speech and a 5 minute reading sample. Andrews and Lngham (1971) report the following normal speaking rates. Darley and Spriestersbach (1978) report the following normal reading rates.

Adolescent/Adult Speech Rates	(WPM) Words per Minute (Range)	(SPM) Syllables per Minute (Range)
Speaking Rates	115 – 165	162 – 230*
Reading Rates	150 – 190	210 – 265

*Mean 196

Peters, T.J. and Guitar, B. Stuttering: An Integrated Approach to Its Nature and Treatment. Baltimore: Williams and Wilkins, 1991. Andrews, G. and Lngham, R. "Stuttering Considerations in the Evaluation of Treatment" British Journal of Communication Disorders, 1971: 6,129-138. Johnson, W., Darley, FL., and Spriestersbach, D.C., Diagnostic Methods in Speech Pathology. New York, Harper & Row, 1978.

Naturalness Rating Scale

NATURALNESS RATING SCALE

Date of Sample

Student's Name		Pre-Test / Post-Test	Ongoing
Time in Sample	Highly Natural		

:15 seconds	1	2	3	4	5	6	7	8	9
:30	1	2	3	4	5	6	7	8	9
:45	1	2	3	4	5	6	7	8	9
1:00	1	2	3	4	5	6	7	8	9
1:15	1	2	3	4	5	6	7	8	9
1:30	1	2	3	4	5	6	7	8	9
1:45	1	2	3	4	5	6	7	8	9
2:00	1	2	3	4	5	6	7	8	9
2:15	1	2	3	4	5	6	7	8	9
2:30	1	2	3	4	5	6	7	8	9
2:45	1	2	3	4	5	6	7	8	9
3:00	1	2	3	4	5	6	7	8	9
3:15	1	2	3	4	5	6	7	8	9
3:30	1	2	3	4	5	6	7	8	9
3:45	1	2	3	4	5	6	7	8	9
4:00	1	2	3	4	5	6	7	8	9
4:15	1	2	3	4	5	6	7	8	9
4:30	1	2	3	4	5	6	7	8	9
4:45	1	2	3	4	5	6	7	8	9
5:00	1	2	3	4	5	6	7	8	9

TOTAL:_____

Mean for adult non-stutterers* = 2.12 – 2.39** Setting: _____ Conversation: _____ Monologues: _____

Rater: _____ (Check One) → Monologue _____ Naïve Listener _____ SLT _____

*May be used for adolescents

**3.0 is the mean for children (in the experience of J. Ingham, 1998)

Source: Balcom, P. et al. 1993. Adapted from Martin, Haroldson and Triden. 1984, (Martin et al.1984 and Ingham et al. 1985)

Naturalness Rating Scale